

Industry: **Big Ox Energy Siouxland, LLC**  
Address: **1616 D Avenue**  
**P.O. Box 880**  
**Dakota City, NE 68731**  
IU Permit No.: **2016-31-I**

**NOTICE OF VIOLATION**  
**City of Sioux City, Iowa**  
**Industrial Pretreatment Program**

**LEGAL AUTHORITY**

The following findings are issued and notice provided pursuant to the authority vested in the City of Sioux City, Iowa Industrial Pretreatment Program, under Title 13 of the Sioux City Municipal Code "Sewers". This order is based on findings of violation of the conditions of the wastewater discharge permit issued under 13.07.270 of the City's Sewers and Sewer Disposal Ordinance.

**FINDINGS**

1. The City of Sioux City, Iowa is charged with the construction, maintenance, and control of the sewer system and treatment works.
2. To protect the sewer system and treatment works, the City of Sioux City, Iowa administers a pretreatment program.
3. Under this pretreatment program, **Big Ox Energy Siouxland** was issued a discharge permit.
4. On June 29, 2018, the City of Sioux City issued a Compliance Order to **Big Ox Energy Siouxland** which required pollutant loadings to be less than 48,509 lbs/day as a maximum daily limitation.
5. On July 13, 2018, the City of Sioux City issued to **Big Ox Energy Siouxland** issued a Cease and Desist Order which required **Big Ox Energy Siouxland** to halt discharge no later than 4 pm on July 24, 2018 due to on-going violations of TSS loadings to the City's collection system.
6. Violations since the July 20, 2018 Notice of Violation (identified violations through July 12, 2018) are on-going based on the following data (lbs of TSS based on concentrations and flow data for each specified day):

| Date      | TSS<br>(lbs/day) | Violation |
|-----------|------------------|-----------|
| 17-Jul-18 | 129,605          | Yes       |
| 18-Jul-18 | 87,263           | Yes       |
| 19-Jul-18 | 4,379            | No        |
| 20-Jul-18 | 27,931           | No        |
| 21-Jul-18 | 106,676          | Yes       |
| 22-Jul-18 | 407,300          | Yes       |
| 23-Jul-18 | 109,366          | Yes       |
| 24-Jul-18 | 72,025           | Yes       |
| 25-Jul-18 | 40,433           | No        |
| 26-Jul-18 | 2,649            | No        |
| 27-Jul-18 | 1,038            | No        |
| 28-Jul-18 | 240              | No        |
| 29-Jul-18 | 38,538           | No        |

Each of the above-documented violations includes a fine of \$1,000 per violation per day. **Big Ox Energy Siouxland** is issued fines of \$1,000 per day per violation totaling \$6,000. Fines will be assessed on the next sewer use surcharge invoice.

7. The City acknowledges that since the additional solids removal equipment was optimized on July 26, 2018 the solids loadings have significantly decreased. However, in addition to the numerical violations listed above, the following items are also considered instances of violations as documented below:
  - Failure to notify of a slug discharge on July 29, 2018 when loadings significantly increased. The City has observed consistent issues with process control on Sundays every week.
  - Failure to adjust process operations based on internal monitoring of TSS as required in the previous notice of violation.
  - Failure to place signage for notification requirements in the event of upsets or changed conditions.
  - Failure to submit the Engineering report as required in the July 20, 2018 NOV.

- Failure to notify of failed equipment (mixer in one of the digesters).

Each of the above-documented violations includes a fine of \$1,000 per violation per day. **Big Ox Energy Siouxland** is issued fines of \$1,000 per day per violation totaling \$5,000. Fines will be assessed on the next sewer use surcharge invoice.

## NOTICE AND REQUIRED ACTIONS

### THEREFORE, BASED ON THE ABOVE FINDINGS, BIG OX ENERGY SIOUXLAND IS HEREBY NOTIFIED THAT:

It is an on-going violation of its discharge permit and the Title 13 of the Sioux City Municipal Code "Sewers" of Sioux City, Iowa and the following specific actions are required. Note that these items are contingent on the consent of the regulatory authorities for the Sioux City, Iowa POTW. Required actions may be updated based on requirements from Iowa Department of Natural Resources, Nebraska Department of Environmental Quality, or Region 7 Environmental Protection Agency. An extension of the Cease and Desist effective date is hereby granted until August 21, 2018 at 4:00 pm dependent on compliance with the following:

1. **Big Ox Energy Siouxland** shall submit daily reports each morning by 10:00 am. The reports shall include at a minimum the following information:
  - Flow from the previous day
  - Internal TSS readings from the previous day (minimum of 4 sample results at most 6 hours apart)
  - A summary of the previous day's operations including any abnormalities and general overview of the performance of the pretreatment system and adjustments made to the system.
  - Include any process modifications to provide effective treatment including documentation of any recycling or diversions from the wastewater system.
  - Status of all process wastewater equipment – provide an inventory of all process equipment and if the equipment is in-use or on stand-by or in need of repair.
2. As previously required, **Big Ox Energy Siouxland** shall develop a proposal and submit that to the City for consideration to propose a plan for compliance. The plan shall include the following components:
  - Specify design influent loadings to the pretreatment system to meet the interim permit limit for TSS of 48,509 lbs/day (note as previously communicated the limits will be further reduced in the future).
  - Include the proposed operator and training requirements to operate the Pretreatment System. The City is requiring that a State Certified Wastewater Operator supervise the operation of the Pretreatment system and all operators shall have appropriate training documented.
  - Documentation that all staff tasked with the sampling of your discharge have been trained in the proper operation and maintenance of the sampling equipment and that the sampling location is as representative of the discharge as possible.
  - Provide a drawing and detail of the sampling pit that demonstrates samples collected from that pit are representative of the waste being discharged.
  - Sealed by a professional engineer (P.E.)
  - This report is due no later than August 6, 2018 at 4:00 pm.
3. The following items are required from previous correspondence:
  - Future violations of not appropriately documenting, notifying, or correcting sampler temperature malfunction will result in the issuance of a violation and an applicable fine. A log is required to be maintained which daily documents the composite sampler temperature and notes any issues with sample collection. The City's Industrial Pretreatment Coordinator shall be notified immediately upon discovery and corrected within 24 hours. Until the correction is made, manual grab samples shall be made every hour. If the issue cannot be corrected within 24 hours, then a portable composite sampler shall be provided by **Big Ox Energy Siouxland**.
  - Signage shall be posted by **Big Ox Energy Siouxland** which provides all notification requirements to the City (and other regulatory agencies) in the event of an upset event. This signage shall be in place on a temporary basis no later than Monday, July 23 at 5 pm and signage intended for permanent mounting (materials and mounting suitable for resisting environmental exposures) shall be posted no later than August 15, 2018.
4. All requirements in previously-issued Orders are fully in-effect including fines and notification requirements. The City also intends to assess past due charges on all late payments and requires payment of all unpaid invoices.

Signatures



Craig Samek  
Industrial Pretreatment Coordinator  
City of Sioux City, Iowa



Mark Simms  
Utilities Director  
City of Sioux City, Iowa

2 August 2018

Date of Issuance of NOV